

## REMARKS

Claims 1-16 are pending, including independent claims 1, 7, 11 and 16. The independent claims are again rejected under 35 U.S.C. § 112, 2<sup>nd</sup> paragraph, as indefinite, although Applicant had clarified the claims in his previous response. Referring to claim 1 as an example, the Examiner apparently objects to the language, "means for translating an original text item in the first language to be converted into voice into a new text item," because the Examiner interprets this language to mean that the original text item is "to be converted into voice." This interpretation was not intended, and this wording in the independent claims has been deleted to overcome the indefiniteness rejection.

All claims are also rejected on the basis of the same prior art as before, with Renegar being the primary reference. In Applicant's previous response, Applicant explained that the claimed invention was an automatic system and method, whereas the Renegar system was a hand-held, paper-based translation system. In reply, the Examiner first argues that the reference to "automatic" operation in the claims is in the claim preamble, which the Examiner does not consider limiting. Applicant has amended the claims to refer to automatic operation in the body of the claim. The Examiner next argues that Renegar does teach an automated system at col. 38, l. 66-col. 39, l. 5. However, this passage only states that the Renegar translation system also can be implemented in other media, including "computer programs," "compact disks," etc. This suggestion would only change the form of the visual presentation in Renegar and still does not disclose the specific automatic processing as recited in Applicant's claims.

It is perhaps most important, however, that the Examiner's remarks appear to reflect a misunderstanding of the invention. In two places (end of numbered paragraph 2 on p. 2, and end of first full paragraph on p. 4), the Examiner interprets Applicant's invention as translating the language of the original text item. This is not the case, because Applicant's invention does not translate words, but rather translates the pronunciation of a character or string in the original text item.

Applicant's invention addresses the situation where text items in multiple languages are to be converted into a voice output, e.g., by using a text-to-speech (TTS) engine. In a conventional TTS engine, a text item is processed and the voice output is generated according to the language of the text item. Thus, for example, a German word is processed and output in the German language, a Japanese word is processed and output in the Japanese language, and so on. Therefore, the need for processes and data for each different language results in a complicated process and requires more resources. (Application, e.g., at ¶¶ 1-6.)

Applicant's claim 1 recites an automated voice generator that takes a text item in a first language and generates a voice output in the pronunciation of a second language. More specifically, a character or string in the original text item that is not included in the second language is automatically replaced by a "translating" means with a character or string in the second language that has an equivalent or similar pronunciation to the pronunciation of the character or string in the first language. The new text item, which includes the replacement character or string, is then output by pronouncing the new text item according to the pronunciation of the second language.

Applicant's invention provides an advantage over conventional TTS engines, because Applicant's invention reduces the languages needed to provide voice outputs in response to multilingual text items. For example, even if place names are in French, German and English, Applicant's invention can be used to provide voice outputs of all of the place names using only the pronunciation in one language, e.g., English. (Application, e.g., at ¶¶ 7-9, 12, 31.)

As an example of the operation of Applicant's invention, Fig. 4B depicts a German-to-English translation rule table by which a German character or string not included in the English alphabet is translated into an English character or string having a pronunciation equivalent or similar to the pronunciation of the German character or string. Thus, the German character "ß" is translated into the English character string "ss." Applying this translation rule in Applicant's invention, the German word "Straße" is changed to "strasse" and pronounced in that form in English. Thus, Applicant's invention does not translate the original word into another language ("Straße" would be

translated as "street" in English), but rather translates character/string pronunciations so that the original text item can be pronounced using the second language.

The cited art does not affect the patentability of Applicant's claimed invention. Claims 1-6 and 11-16 are rejected as anticipated by Renegar. However, Renegar does not provide an automated system or method for replacing a character or string in an original text item in a first language that is not included in a second, output language with a character or string in the second language that has an equivalent or similar pronunciation. Moreover, Renegar does not disclose a means or method of providing a voice output by pronouncing the new text item according to the pronunciation of the second language.


Regarding independent claim 16, Renegar also does not disclose a navigation apparatus, a map database for storing geographic information containing a place name text item representing each place name, or a means for reading out a place name text item from the map database. The passage cited by the Examiner (col. 13, lines 40-67) describes a Destination Locator section 37 of the Renegar product (see Fig. 3) that displays words to allow a user to formulate questions to "navigate," e.g., words such as "go" and "turn"; distance entries such as "block" and "mile"; and directions such as "left," "across from," and "north." There is no map database, or collection of place names, or means for reading out place names.

Claims 7-10 are rejected as obvious over Renegar in view of Conkie. Independent claim 7 distinguishes over Renegar as described above. Additionally, claim 7 recites that when the original text item is abbreviated, the replacement of a character or string is done according to the full original text item. The Examiner concedes that Renegar does not disclose this feature, but asserts that this feature is found in Conkie. However, the cited passage in Conkie (col. 4, lines 31-57) describes a linguistic processor of a speech synthesizer that pronounces a non-abbreviated word in the same language as the abbreviation. There is no suggestion that the two references can or should be combined in any way to approximate Applicant's claimed invention.

Accordingly, Applicant requests the entry of the proposed amendments, submits that the claims as amended are patentable over the cited art, and respectfully requests reconsideration and allowance of this application. The proposed amendments were not

requested earlier because Applicant believed the claim language was clear and distinguished over the cited art. If the Examiner believes the application still is not in condition for allowance, the Examiner is requested to call Applicant's undersigned attorney at (312) 321-4723.

Respectfully submitted,

  
James P. Naughton  
Registration No. 30,665  
Attorney for Applicant

BRINKS HOFER GILSON & LIONE  
P.O. BOX 10395  
CHICAGO, ILLINOIS 60610  
(312) 321-4200